

### **REMARKS**

Claims 1-10 are pending. Claim 9 is amended with this response. Claims 11-18 were previously withdrawn with the prior response. Reconsideration of the application is respectfully requested for at least the following reasons.

#### **I. REJECTION OF CLAIM 9 UNDER 35 U.S.C. § 112**

Claim 9 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter the applicant regards as the invention. Withdrawal of the rejection of claim 9 is respectfully requested for at least the following reasons.

Claim 9 has been amended to definitely point to the use of one processor for decrypting incoming data. Further, the office action alleges that in “the Applicant’s specification, it seems that the two processor[s] encrypting are the same processors for decrypting.” We respectfully disagree with this assertion. In fact, in fig. 1A the security system 14, in the network interface system 2, explicitly shows the use of a single receive IPsec processor 22 for incoming data, while there are two transmit IPsec processors 20 and 21 for outgoing data. Also, in fig. 2 the IPsec module 124, in the exemplary network controller 102, explicitly shows the use of a single receive (RX) IPsec processor 150 for processing incoming data, while there are two TX IPsec processors 174a and 174b processing outgoing data.

#### **II. REJECTION OF CLAIMS 1-5 UNDER 35 U.S.C. § 103(a)**

Claims 1-5 were rejected under 35 U.S.C. §103(a) as being unpatentable over Pham (U.S. Patent Application Publication 2003/0115447) in view of Fahrny *et al.* (U.S. Patent Application Publication 2005/0169468), and further in view of Bolt *et al.* (U.S. Patent Application Publication 2004/0243745). Reversal of the rejection is respectfully requested for at least the following reasons.

***i. Neither Pham nor Fahrny teach the use of a security system configured to send outgoing data packets alternately to one or the other processor for encryption, as recited in independent claim 1.***

It is conceded in the Office Action that Pham does not explicitly teach a security system configured to send outgoing data packets alternately to one or the other processor for encryption. However, claim 1 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Pham in view of Fahrny. **Withdrawal of the rejection of claim 1 and its respective dependent claims is respectfully requested** for at least the following reasons.

We note here that the Office Action alleges that “Hamilton” is the reference that teaches the elements not taught by Pham, where in fact the Office Action is likely referring to “Fahrny” (not Hamilton), as it does in other locations. The Office Action alleges that [Fahrny] teaches a security system configured to send outgoing data packets alternately to one or the other processor for encryption.” **We respectfully disagree with this analysis; the features of the present invention of claim 1 differ substantially from the Fahrny disclosure.**

As alleged in the Office Action, [Fahrny] discloses “a variety of encryption engines, each specializing in a different type of encryption algorithm.” While Fahrny does disclose a type of arrangement of engines, which perform both encryption and decryption (paragraph 32), the present invention of claim 1 utilizes two processors for encryption of outgoing data, not decryption of incoming data. Further, the arrangement of engines in Fahrny discloses that they are used in parallel, each simultaneously encrypting/decrypting a different type of digital media from different devices (paragraphs 32, 38-46, and fig. 1). However, the present invention of claim 1 uses two processors to encrypt data packets alternately from the same source, processing for encryption a first outgoing data packet using the first processor, then processing a subsequent data packet using the second processor, then continuing to move processing back and forth between the processors as information comes into and goes out of the processors. Additionally, Fahrny discloses that encrypting/decrypting engines are added as additional media devices and digital media types are added, in order to process specific

types of data associated with each new device and media type (paragraphs 10, 11, 23, 27, 32, 33, 35, 38-42, and fig.1). However, the present invention of claim 1 uses only two computer processors for encrypting outgoing data packets, and additional processors are not added to process different media types.

Therefore, Fahrny does not teach the elements of claims 1, a security system configured to send outgoing data packets alternately to one or the other processor for encryption. Accordingly, withdrawal of the rejection of claim 1 and its respective dependent claims is respectfully requested.

***ii. The Office Action fails to satisfy the necessary requirements for establishing a prima facie case of obviousness for rejection of claim 1, as the combination of Pham and Fahrny is improper.***

The MPEP section 2143 states that to establish a *prima facie* case of obviousness there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Further, the teaching or suggestion to make the claimed combination must be found in the prior art, not in applicant's disclosure.

Applicants contend that the combination of Pham and Fahrny is improper. The Office Action alleges that one of ordinary skill would have been motivated to add the Fahrny reference to the Pham reference “to provide for an improved system for security processing, while providing upgrades to encryption/decryption.” However, the Fahrny reference does not teach what is alleged by the Office Action in the cited reference (paragraphs 6, 7, and 8). The “upgrades to encryption/decryption” referenced in Fahrny refer to the cost of upgrading when various digital media suppliers provide proprietary encryption/decryption systems (paragraph 6). Nowhere in Fahrny does it state that its system is an upgrade to encryption/decryption technology. In fact, the Fahrny disclosure is an attempt to create a uniform system, instead of a variety of proprietary systems that various digital media providers use. Further, the Fahrny reference to “security processing” is likely a typo, as they are attempting to create a system that

[securely] processes media streams, i.e., a way to scramble and descramble digital video sent out over satellite and cable television systems.

Additionally, the Office Action alleges that “Pham and Fahrny are both directed to secure media encryption involving multiple processors in a network environment.” However, Pham is not directed toward secure media encryption; rather, Pham is directed toward network architecture for data security of distributed data storage systems, and security management of the stored data. Further, Fahrny does not involve a network environment, but instead involves signal processing units that are individually disparate from each other, not linked in a network environment. The Fahrny systems are essentially boxes designed to receive incoming digital media streams (cable boxes) (paragraphs 10, 17, 23, 41, 43), not network interface systems.

The Fahrny reference (paragraphs 6, 7, and 8) does not teach “security processing, while providing upgrades to encryption/decryption,” as alleged by the Office Action. The Pham and Fahrny references are not both directed to secure media encryption involving multiple processors in a network environment as alleged by the Office Action. Therefore, it is non-obvious to combine features of the two disclosures. Accordingly, withdrawal of the rejection of claim 1 and its respective dependent claims is respectfully requested.

### **III. REJECTION OF CLAIMS 9 UNDER 35 U.S.C. § 103(a)**

Claim 9 was rejected under 35 U.S.C. §103(a) as being unpatentable over Pham, Fahrny, and Bolt. It is conceded in the Office Action that “the Pham combination does not explicitly teach wherein the security system comprises more processors for encrypting and authenticating outgoing data than for decrypting incoming data.” However, claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the Pham combination. **Withdrawal of the rejection of claim 9 is respectfully requested** for at least the following reasons.

The Office Action alleges that the feature in this claim, wherein the security system comprises more processors for encrypting and authenticating outgoing data

than for decrypting incoming data, “would have been obvious.” The MPEP section 2144.03 part B states that when official notice is taken of a fact, unsupported by documentary evidence, the technical line of reasoning underlying a decision to take such notice must be clear and unmistakable. Here, the cited art of record, the Pham combination, and the “Official Notice” taken in the record does not provide any disclosure, detail, or factual findings predicated on sound technical and scientific reasoning that would make this system obvious to one of ordinary skill. We respectfully disagree with examiner’s understanding of the invention of claim 9. The Office Action alleges that it is common sense that a system would need more computing power to perform both authenticating and encryption than it would to just perform decryption; therefore it is obvious that a system would need more processors. However, the purpose of having at least two processors for encrypting and authenticating is not to account for additional steps, as described in the Office Action, but to increase the outgoing processing speed. In computing, authenticating outgoing data does not require similar amounts of processing capabilities as does encrypting or decrypting. In fact, authentication typically needs a fraction of the processing capabilities and encryption/decryption. Therefore, the purpose of the additional processor cannot be for the reasons stated in the Office Action. **We do not concede that these features are well known in the art.**

Consequently, **it would not have been obvious** to one of ordinary skill in the art at the time the invention was made to incorporate wherein the security system comprises more processors for encrypting and authenticating outgoing data than for decrypting incoming data, in to the Pham combination disclosures. Because no detail or factual findings to the contrary are disclosed in the cited art or in the record, we respectfully request withdrawal of the rejection of claim 9. In the alternate, please provide us with factual findings predicated on sound technical and scientific reasoning that would make this system obvious to one of ordinary skill.

**VIII. CONCLUSION**

For at least the above reasons, the claims currently under consideration are believed to be in condition for allowance.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should any fees be due as a result of the filing of this response, the Commissioner is hereby authorized to charge the Deposit Account Number 50-1733, AMDP751US.

Respectfully submitted,  
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